

WHAT IS CLAIMED IS:

1. A method for manufacturing a panel assembly having inner and outer panels, comprising:

forming a flange portion at an edge of an outer panel;

5 applying a hemming sealer to an interior portion of the flange portion of the outer panel;

positioning an inner panel at the flange portion of the outer panel that is applied with the hemming sealer;

compressing the inner panel to the outer panel; and

10 hemming an edge of the inner panel with the flange portion of the outer panel such that a gap of a predetermined clearance larger than zero (0) is formed between the inner panel and an edge of the outer panel.

2. The method of claim 1, wherein the gap extends along the entire edge of the outer panel having the flange portion.

3. The method of claim 2, wherein the predetermined clearance lies in a range of between about 0.4-0.6mm.

20 4. The method of claim 1, wherein the hemming sealer comprises a plurality of beads that interconnect the inner and outer panels when the inner panel is compressed to the outer panel.

25 5. The method of claim 1, further comprising forming, in the gap, at least one layer of a phosphate layer and an electrodeposition layer.

6. A panel assembly comprising:

an outer panel; and

30 an inner panel at least part of which is attached to an inner surface of the outer panel,

wherein an edge of the outer panel is bent to a side of the inner panel opposite to the at least part of the inner panel, and

a gap of a predetermined clearance larger than zero (0) is formed between the inner panel and the edge of the outer panel.

5 7. The panel assembly of claim 6, wherein the gap extends along the entire edge of the outer panel bent to the inner panel.

8. The panel assembly of claim 7, wherein the predetermined clearance lies in a range of between about 0.4-0.6mm.

10 9. The panel assembly of claim 6, wherein the at least part of the inner panel is compressed to the outer panel interposing a hemming sealer, the hemming sealer comprising a plurality of beads that interconnect the inner and outer panels when the inner panel is compressed to the outer panel.

15 10. The panel assembly of claim 6, wherein at least one layer of a phosphate layer and an electrodeposition layer is formed in the gap.

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